6EA7

Dual Triode

With High-Mu Unit and Low-Mu Unit

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:
- Voltage (AC or DC) . . . . 6.3 ± 10% volts
- Current at 6.3 volts . . . . 1.05 amp

Direct Interelectrode Capacitances (Approx.):[a]

	Unit No.1	Unit No.2	
Grid to plate	4	8	μμf
Grid to cathode and heater	2.2	6	μμf
Plate to cathode and heater	0.6	1.3	μμf

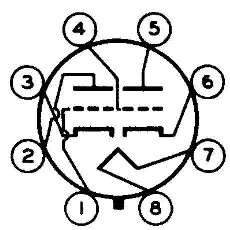
Characteristics, Class A_1 Amplifier:

	Unit No.1	Unit No.2		
Plate Voltage	250	60	175	volts
Grid Voltage	-3	0	-25	volts
Amplification Factor	66	-	5.5	
Plate Resistance (Approx.)	30000	-	920	ohms
Transconductance	2200	-	6000	μmhos
Plate Current	2	100[b]	40	ma
Grid Voltage (Approx.) for plate μa = 20	-5.3	-	-	volts
Grid Voltage (Approx.) for plate μa = 200	-	-	-45	volts

Mechanical:

Operating Position . . . . Any
Maximum Overall Length . . . . 3"
Maximum Seated Length . . . . 2-7/16"
Maximum Diameter . . . . 1-9/32"
Bulb T9
Base . . . . Intermediate-Shell Octal 8-Pin (JEDEC Group 1, B8-6)
Basing Designation for BOTTOM VIEW 8BD

Pin 1 - Grid of Unit No.2
Pin 2 - Plate of Unit No.2
Pin 3 - Cathode of Unit No.2
Pin 4 - Grid of Unit No.1



Pin 5 - Plate of Unit No.1
Pin 6 - Cathode of Unit No.1
Pin 7 - Heater
Pin 8 - Heater

VERTICAL-DEFLECTION OSCILLATOR

Values are for Unit No.1

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[c]

DC PLATE VOLTAGE	350	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	400	max.	volts
PLATE DISSIPATION	1	max.	watt
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[d]	max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:			
For fixed-bias operation	1	max.	megohm
For cathode-bias operation	2.2	max.	megohms

VERTICAL-DEFLECTION AMPLIFIER

Values are for Unit No.2

Maximum Ratings, *Design-Maximum Values:*

For operation in a 525-line, 30-frame system[c]

DC PLATE VOLTAGE	550	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE[e]	1500	max.	volts
PEAK NEGATIVE-PULSE GRID VOLTAGE	250	max.	volts
CATHODE CURRENT:			
Peak	175	max.	ma
Average	50	max.	ma
PLATE DISSIPATION	10	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200[d]	max.	volts

Maximum Circuit Values:

Grid-Circuit Resistance:			
For fixed-bias operation	1	max.	megohm
For cathode-bias operation	2.2	max.	megohms

[a] Without external shield.

[b] This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

[c] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

[d] The dc component must not exceed 100 volts.

[e] This rating is applicable where the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.